

What is claimed is:

1. A heat sink clip for attaching a heat sink to an electronic package that is mounted on a printed circuit board, the heat sink clip comprising:
two pressing members each comprising a pressing portion and two spring portions extending from opposite ends of the pressing portion, a first locking portion depending from one of the spring portions;
a connecting member connecting the pressing members;
two operating members each having spaced first and second pivot means, the second pivot means being below the first pivot means, the operating members respectively pivotably connected to the other one of the spring portions of the pressing members at the second pivot means; and
two second locking portions respectively pivotably connected to the operating member at the first pivot means, wherein
when the operating members are rotated downwardly, the first and second locking portions are raised, adapted for engaging with a retention frame and securing the heat sink to the electronic package.
2. The heat sink clip as described in claim 1, wherein the pressing members are made of metal, and the connecting member is made of plastic.
3. The heat sink clip as described in claim 1, wherein the first and second locking portions respectively comprise hooks.
4. The heat sink clip as described in claim 1, wherein the first and second pivot means of the operating members respectively comprise pivot holes.
5. The heat sink clip as described in claim 1, wherein the two operating members are parallel to each other, and are integrally interconnected by a first crossbeam.

6. The heat sink clip as described in claim 1, wherein the two second locking portions are parallel to each other, and are integrally interconnected by a second crossbeam.
7. The heat sink clip as described in claim 1, wherein two tabs are formed at a free end of said other one of the spring portions of each pressing member, and each of the tabs defines a first pivot hole.
8. A heat sink clip assembly comprising:
 - a circuit board;
 - an electronic package mounted on the circuit board;
 - a retention frame attached to the circuit board around the electronic package;
 - a heat sink attached onto the electronic package, the heat sink having a base and a plurality of fins extending upwardly from the base; and
 - a heat sink clip attaching the heat sink to the electronic package, the clip comprising a connecting member, two pressing members connecting to the connection member, each pressing member comprising a pressing portion and two spring portions extending from opposite ends of the pressing portion, a first locking portion depending from one of the spring portions of each pressing member, an operating member pivotably connected to the other one of the spring portions of each pressing member, and a second locking portion pivotably connected to the corresponding operating member, wherein
 - when the operating members are rotated downwardly, the first and second locking portions are raised, so that the first and second locking portions are respectively engaged with the retention frame and the heat sink is thereby secured to the electronic package.
9. The heat sink clip assembly as described in claim 8, wherein each of the

operating members has first and second pivot means, and the second pivot means is below the first pivot means.

10. The heat sink clip assembly as described in claim 9, wherein each of the operating members has a handle for facilitating manual operation.
11. The heat sink clip assembly as described in claim 9, wherein the second locking portions are pivotably connected to the operating members at the first pivot means.
12. The heat sink clip assembly as described in claim 9, wherein the first locking portions are pivotably connected to the operating members at the second pivot means.
13. The heat sink clip assembly as described in claim 9, wherein the first and second pivot means of the operating members respectively comprise pivot holes.
14. The heat sink clip assembly as described in claim 8, wherein the first and second locking portions respectively comprise hooks.
15. The heat sink clip assembly as described in claim 8, wherein the retention frame is rectangular, and has four arms extending upwardly from four corners thereof.
16. The heat sink clip assembly as described in claim 15, wherein the first and second locking portions are respectively engaged in four holes respectively defined in the arms of the retention frame.
17. The heat sink clip assembly as described in claim 8, wherein the pressing members are made of metal, and the connecting member and the operating

members are made of plastic.

18. A heat sink assembly comprising:

a printed circuit board;

an electronic package sub-assembly mounted on the printed circuit board;

a retention module positioned on the printed circuit board and surrounding said electronic package sub-assembly;

a heat sink seated upon the electronic package sub-assembly;

a hybrid type fastening clip located upon the heat sink, said clip including:

a pair of spaced pressing members made from relatively resilient material and essentially extending in a first direction with superior deflectability in a vertical direction perpendicular to said first direction;

a connection beam made from relatively rigid material connected between said pair of pressing members on one side of said clip and extending in a second direction perpendicular to both said first direction and said vertical direction so as to prevent relative movement between said pair of pressing members in said second direction on said side of the clip; and

an operating member and an associated locking portion commonly connected between said pair of pressing members on the other side of the clip and extending in said second direction so as to prevent relative movement between said pair pressing members in said second direction on said other side of the clip; whereby

the clip is formed with not only better resiliency in the vertical direction but also better rigidity of a whole structure thereof.

19. The assembly as described in claim 18, wherein said locking portion is latched to the retention module;

20. The assembly as described in claim 18, wherein said pressing member further includes another locking portion latched to the retention module.

21. The assembly as described in claim 18, wherein said operating member and said locking portion are discrete from each other under a condition that said operating member is pivotally mounted to the pressing member and said locking portion is pivotally mounted to the operating member.